nephrotic syndrome (1; 1.6%). **CONCLUSIONS:** Of the total of prescriptions, 76.1% were compliance with indications in national guidelines. However, unsubstantiated prescriptions represented a cost of around 22.0% of the total budget spent on the acquisition of albumin and that could have been applied in other unmet needs due to lack of financial resources.

PHP125

COST-SAVINGS AND COST-UTILITY OF AN EHR SYSTEM SMARTPHONE APP IN A TRAUMA INTENSIVE CARE UNIT

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OBJECTIVES: To assess the costs, benefits and savings of MobileCARE, an electronic health record (EHR) system smartphone application for clinical documentation developed by the United States Army and University of Miami, and implemented in a trauma intensive care unit (TICU). To evaluate provider perceptions of MobileCARE's usability and impact on clinical workflow and productivity. **METHODS:** A cost-effectiveness and cost-utility analysis was conducted using hospital-level cost data and clinical outcomes data collected retrospectively at three time periods: pre-MobileCARE and two subsequent iterations of MobileCARE from 2010-2014. An analysis was performed of direct costs related to the mobile health intervention and benefits related to patient's clinical outcomes. Qualitative interviews (n=20) were conducted with providers working in the TICU and using MobileCARE. Ethnographic observation of clinical workflow and MobileCARE usage was conducted over the course of 12 days. **RESULTS:** The total cost of MobileCARE was $2,655,639.67, consisting of $1,943,399.47 towards platform development and a fixed, direct cost of implementation totaling $712,239.70. Transcription cost-savings per-provider were $79.25/month. Average length of stay decreased by 1.73 days, average mortality rate decreased by 2%, and QALDs increased by 1.8 QALD per patient over the study period. These clinical trends show directional improvement, although no significant differences were found. Overall, providers found MobileCARE acceptable, easy to use, positively impacted workflow, and increased their productivity. **CONCLUSIONS:** MobileCARE appears to be an affordable option for improving EHR usability, physician productivity, and clinical outcomes. The overall cost of developing MobileCARE is high, but consistent with similar technologies previously developed. The single-time cost of implementation is justifiable given the ongoing cost-savings, time-savings, indicated trends of clinical outcome benefits, and overall user acceptance of the system. MobileCARE is a viable option for TICU's seeking low-cost and usable mobile documentation systems to enhance existing EHR system usability and effectively reduce hospital transcription costs.

PHP126

USING AN ECONOMIC MODEL TO CHOOSE INITIAL APPROPRIATE ANTIBIOTIC THERAPY BASED ON DIFFERENCES IN IN-VITRO SUSCEPTIBILITY TO CEFTOLOZANE/TAZOBACTAM AND PIPERACILLIN/TAZOBACTAM

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OBJECTIVES: An increase in prevalence of antimicrobial resistance among gram-negative pathogens in complicated intra-abdominal infections (cIAI) has been noted recently (Sartelli et al 2013). A challenge in empiric treatment of cIAI is identifying initial appropriate antibiotic therapy (IAAT), which is associated with reduced length of stay and mortality compared with inappropriate therapy. Using local antibiogram data to select empiric therapy may increase the likelihood of IAAT. The objective of this research is to demonstrate how an economic model can assist medical decision-making by identifying threshold differences in antibiotic resistance at which ceftolozane/tazobactam+metronidazole is cost-effective/cost-saving compared with piperacillin/tazobactam as IAAT. **METHODS:** We used a decision analytic Monte Carlo simulation model (Kauf et al 2015) to compare cost and QALYs of persons infected with nosocomial gram-negative cIAI and treated empirically with either ceftolozane/tazobactam+metronidazole or piperacillin/tazobactam. We ran the model for baseline prevalence of resistance in the Program to Assess Ceftolozane/Tazobactam Susceptibility (PACTS) in-vitro surveillance database. We limited threshold analysis to three commonly isolated gram-negative pathogens: Escherichia coli, Klebsiella pneumoniae, and Pseudomonas aeruginosa. We assumed resistance for both drugs to be similar and then increased resistance in the piperacillin/tazobactam arm for all three pathogens simultaneously. Threshold differences in resistance at which ceftolozane/tazobactam became cost-effective were estimated. **RESULTS:** At baseline resistance levels from PACTS, ceftolozane/tazobactam+metronidazole was cost-saving compared with piperacillin/tazobactam. Ceftolozane/tazobactam was cost-effective (cost-saving) when resistance rates for the three bacteria in the piperacillin/tazobactam were > 2% (7%) relative to ceftolozane/tazobactam. When resistance rates for E. coli alone were changed, ceftolozane/tazobactam was cost-effective (cost-saving) at differences > 3% (13%). Results were sensitive to gram-positive/-negative pathogen prevalence, drug/hospitalization cost. **CONCLUSIONS:** Economic models can be used to identify IAAT based on in-vitro resistance data. Once threshold differences in antibiotic resistance that make a comparator drug cost-effective are established, local antibiograms can help identify optimal IAAT.

PHP128

THE INFLUENCE OF THE REVISION OF THE MEDICAL FEE SCHEDULE ON NATIONAL HOSPITAL ORGANISATION HOSPITALS IN JAPAN

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OBJECTIVES: Ministry of Health, Labour and Welfare of Japan revises medical fee schedule biennially. The revision is performed in line with the government's budget policy at national level. This study explored the influence of the manipulation of the medical fee schedule on National Hospital Organization (NHO) hospitals to overview the changes in business condition in Japan's healthcare system. **METHODS:** The financial statements of all 143 NHO hospitals from 2004 to 2013 were obtained to explore the changes in their financial conditions. We analysed them with total health expenditures and the revision rates of the medical fee schedule available from the government websites. **RESULTS:** The medical fee schedule was reduced by 3.16% in 2006 and 0.82% in 2008, and then increased by 0.19% in 2010 and 0.004% in 2012. The change rate of the profit per bed in NHO hospitals was overall parallel to the change rate of total health expenditure except for 2010 when the change rates were increased in 6.9% and 3.9% respectively. The reason of the exception in 2010 can be associated with the transition to acute care in line with the government policy to promote functional differentiation of hospitals. NHO hospitals with more than 350 beds had continuously increased the change rate of profit per bed despite of the negative revisions to the medical fee schedule in 2006 and 2008. **CONCLUSIONS:** Clear influence of the manipulation of the medical fee schedule was observed over the profit per bed in NHO hospitals. The rate of increase in total health expenditure was fairly controlled by the government through the revision of the medical fee schedule.

PHP129

PREDICTION OF FUTURE HEALTH INSURANCE EXPENDITURES IN HUNGARY ACCORDING TO POPULATION FORECAST SCENARIOS

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OBJECTIVES: The aim of our study was to predict the future health insurance expenditures according to the changes in the number of population in Hungary. **METHODS:** Actual health insurance expenditure data for the base-case year (2013) were derived from the National Health Insurance Fund Administration (NHIFA) of Hungary and covered the following types of care: acute and chronic inpatient care, out-patient care, laboratory care, CT and MRI, drug, medical devices and home care. We analyzed health insurance expenditures according to age and gender. The prediction of future number of Hungarian population was calculated according to the population forecast of the Central Statistical Office of Hungary for 2060. We applied 3 scenarios: basic, low and high number of population. **RESULTS:** The actual health insurance expenditures of NHIFA was õ15.8 billion Hungarian Forint (HUF) in 2013 and the population of Hungary was 9910811 people. For the year 2030, health insurance expenditures were assessed 938.2 billion HUF while the population is predicted 9211522 people. For the year 2060, health insurance expenditures were assessed 908.5 billion HUF while the population is predicted 7922289 people. Health insurance expenditures for population under 25 years was 10.2 % of total expenditures, which decreased to 8.7 % in 2030 and 7.2 % in 2060. Health insurance expenditures for population over 65 years was 40.3 % of total expenditures, which increases to 47.0 % in 2030 and 58.9 % in 2060. **CONCLUSIONS:** Health insurance expenditures of Hungary will not increase significantly on actual level up to 2060. The reason behind this fact is the serious decline int he number of population. However, there will be a significant shift in the expenditures by decreasing the proportion of population below 25 and increasing the proportion of people aged over 65 years.

PHP130

ITALIAN HEALTHCARE EXPENDITURE TRENDS FROM 2002 TO 2013

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OBJECTIVES: Italy has a tax-funded National Health System (NHS) that guarantees universal provision of comprehensive care. The central government provides policy and planning framework, defines the Essential Levels of Care and guarantees financial sustainability, while the regions are responsible for healthcare delivery and are liable for any budget deficit. Since 2005, cost-containment and prescription appropriateness policies were developed in order to make regions more responsible on healthcare expenditure. The aim of this research was to provide an overview of national healthcare expenditure trends before and after the implementation of such policies. **METHODS:** Data published by the Minister for Economic and Financial Affairs were analysed to show different expenditure trends in different time periods: before 2005 (period: 2002-2005) and after (2006-2013). **RESULTS:** National healthcare expenditure from 2002-2013 increased by about €30.28 billion (€78.97 in 2002 and €109.26 billion in 2013/year) with an average annual rate of +3.2%. Trends were different per period, with average annual rates of +5.4% in 2002-2005 and +1.3% in the period 2006-2013; +2.6% increase in the period 2006-2009 and -0.3% in 2010-2013. In the period 2006-2013, healthcare expenditures components - such as healthcare professionals, general practitioners and hospital services - showed a lower average annual growth rate compared with the 2002-2005 period. Territorial drug expenditures show a dramatic decrease compared to the previous period. **CONCLUSIONS:** Our analysis show that there is still room for better rationalise healthcare expenditure, however the greater empowerment of the regions and the policies implemented in recent years have improved the economic performance of the Italian healthcare expenditure.

PHP131

THE IMPACT OF PHARMACEUTICAL INNOVATION ON LONGEVITY IN PORTUGAL, 2002–2010

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OBJECTIVES: In Portugal, during the period 2002–2010, longevity (mean age at death) increased by 2.5 years. The aim of this study was to examine the effects of pharmaceutical innovation on the longevity from all diseases in Portugal (2002–2010). **METHODS:** Longitudinal disease-level data was analyzed to determine whether diseases for which there was greater pharmaceutical innovation - a larger